

REMARKS

Claims 1-20 are pending. Claim 1 is amended to incorporate the subject matter of claims 8 and 9, which claims are correspondingly canceled.. Claim 18 is amended to include the features of claim 12. Amendments to the claims are supported in the specification and by the claims as originally filed. The specification is amended for clarity. Review and reconsideration of the application in view of the above amendments and the following remarks are respectfully requested.

Restriction Requirement

The Patent Office has made final the restriction between Group I, claims 1-11 and 18-20, and Group II, claims 12-17. The Patent Office asserts again that a search for the claimed product would not disclose the process of claims 1 and 18, and the claims dependent therefrom, and would further be unduly burdensome because it would involve additional search terms, for example, specific enzymes and coating methods. Applicants do not agree with the Examiner's position because disclosure of methods of forming a microarray necessarily disclose the structure of the microarray. Therefore, a search for a microarray structure would provide a significant amount of art pertaining to the method claims. However, Applicants note the Patent Office has made the rejection final.

Applicants herein amend claims 1 and 18 to incorporate all the features of product claim 12. In accordance with MPEP §821.04, search and consideration of the process claims upon allowance of the related product claims are in order, and are respectfully requested.

35 U.S.C. § 103(a) Rejection of Claims 12-17

Claims 12-16 have been rejected under 35 U.S.C. § 103(a) over Dickinson et al. (US 6,770,441) in view of Anderson et al. (US 6,846,635). Claim 17 has been rejected under 35 U.S.C. § 103(a) over Dickinson et al. in view of Anderson et al., and further in view of Baidya et al. (US 6,716,579). The Patent Office asserts that Dickinson et al. teaches a microarray comprising a support with immobilized microspheres in adhesive wherein only a portion of the microspheres is submerged in the adhesive. It is admitted Dickinson et al. does

not teach use of gelatin, and Anderson et al. is relied on for that teaching. Baidya et al. is cited for a flexible support. For at least the following reasons, Applicants traverse each rejection.

As stated, the Patent Office states Dickinson et al. teaches a microarray comprising a support with immobilized microspheres in adhesive wherein only a portion of the microspheres is submerged in the adhesive. The Patent Office refers to col. 13, lines 24-32, and Figs. 16a-c for support. Applicants note Figs. 16a-c are only described in the Brief Description of the Figures at col. 4, lines 14-25. Neither the text nor the figures disclose or suggest the placement of an adhesive layer with regard to the microspheres. The support 105 and microsphere 110 are shown in relation to a capture probe 120 and linker 115. No adhesive is mentioned or shown. Therefore, Figs. 16a-c do not disclose or suggest any relation of a coating and microspheres.

Col. 13, lines 24-32 of Dickinson et al., cited by the Patent Office, describes discrete sites of physical or chemical attachment of microspheres to the support. The only mention of adhesive is at col. 13, line 32, reciting "...spots of adhesive, etc.," with regard to "... the use of other forces..." (col. 13, line 28) at the discrete bonding sites of the microspheres. Nowhere does Dickinson et al. disclose or suggest a microsphere having a first portion submerged in a gelatin coating, or any other coating, and a second portion exposed above the coating substantially free of the coating.

The Patent Office relies on the use of Anderson et al. to disclose the use of gelatin. The Patent Office cites col. 9, lines 6-8, and col. 9, line 65, through col. 10, line 4, as teaching immobilization of microspheres to a solid support, for example a tubule, in gelatin. When read in full, beginning at col. 9, line 58, through col. 10, line 20, the paragraph describes a hollow tubule, or fiber, filled with the gelatin or other polymerizing material in which "agents of interest" are directly attached. This is shown in Figure 3, wherein the tubule 16 is filled with a crosslinked gel 17 with attached agents of interest 18. As shown in the various views of Figure 3, the crosslinked gel 17 completely surrounds the agents of interest 18. Anderson et al. does not disclose or suggest microspheres having a first portion submerged in a gelatin coating, and a second portion exposed above the gelatin coating and substantially free of gelatin.

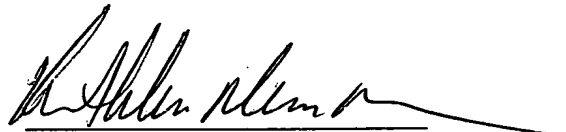
As claimed by Applicants, and as shown in example 4 at pages 17 and 18 of the specification as filed, the microspheres must have a portion that is substantially free of gelatin in order to react with the labeled target. Neither Dickinson et al. nor Anderson et al. disclose or suggest that at least a portion of the microspheres is substantially free of the coating, for example, gelatin. Thus, the references do not disclose or suggest the subject matter of the claimed invention. The reference of Baidya et al. also does not disclose or suggest a microarray having a support with a surface containing microspheres immobilized in a gelatin coating wherein a first portion of the microspheres is submerged in the gelatin coating, and a second portion is exposed above the gelatin coating and substantially free of gelatin. For at least the above reasons, none of the references taken alone or in combination disclose or suggest the subject matter of claims 12-17. Reconsideration and withdrawal of the rejections are in order, and are respectfully requested.

Conclusion

For at least the reasons set forth above, Applicants submit all of Claims 1-20 are in condition for allowance. Prompt and favorable action in the form of a Notice of Allowance are in order, and are respectfully requested.

Should the Examiner require anything further, or have any questions, the Examiner is asked to contact Applicants' undersigned representative.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.